

MALENEV, Fedor Yefimovich; ALEKSEYEV, Yu.V., red.; BARANOVA, L.G.,
tekh. red.

[Microelements in phytopathology] Mikroelementy v fito-
patologii. Leningrad, Izd-vo sel'khoz. lit-ry, zhurnalov i
plakatov, 1961. 119 p. (MIRA 15:3)
(Plant diseases) (Trace elements)

USSR/Plant Diseases. Diseases of Cultivated Plants.

Abs Jour: Ref Zhur-Biol., No 5, 1950, 20686.

0

B was manifested only on root resistance, and of Mn -- on leaf resistance. The effect of Zn was slight, while Cu and B caused a greater increase in root resistance to bacterioses -- the common kind and black scab -- than Mn and Zn. Cu and B (+37 and 33%) had the most beneficial effect on the harvest, Mn (+29%) had less, and Zn still less. Of all the methods tested for supplying the potato roots with microelements, the best was treating the roots before sowing. In addition, it is recommended that B be added to the soil as a supplement. Organic fertilizers and soil moisture heighten the action of the microelements.

Card : 3/4

USSR/Plant Diseases. Diseases of Cultivated Plants.

0

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20686.

tato leaves (200 mg. per liter) every 7-10 days, starting on June 25, with $\text{Na}_2\text{D}_4\text{C}_7$, CuSO_4 , ZnSO_4 , and KMnO_4 salt solutions, and also of applying these salts (100 mg.) to the soil below the root when roots were being set out to develop fungoid (*Phytophthora infestans* D.B., *Rhizoctonia solani* Kuhn.) and bacterial diseases (*Dactarium xanthochlora* Schust., *Dacillus phytophthorus* Appel, *Dactarium sepedonicum* Spieck and others). The following varieties were tested: Kobbler -- early maturing, Derlikhingen -- medium maturing, hybrid No. 398 and Kobbler X Yubel' -- medium late maturing. The greatest increase in resistance of the roots and leaves to phytophthorosis derived from the use of Cu. The influence of

Card : 2/4

USSR/Plant Diseases. Diseases of Cultivated Plants. 0

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20686.

Author : ~~Maleney, E. Ya.~~

Inst : AS, LatvSSR.

Title : The Influence of Boron, Copper, Manganese, Zinc on
the Resistance of the Potato to Phytophthora and
Other Diseases.

Orig Pub: Sb: Mikroelementy v s. kh. i meditsine. Riga. Akad
Nauk LatvSSR, 1956, 429-436.

Abstract: A series of laboratory and field experiments conducted from 1950 to 1953 in the Leningrad Agricultural Institute studied the influence of root treatment before sowing (germination in sawdust treated with solution) and of sprinkling the po-

Card : 1/4

MALENKOV, P.Ye., kandidat sel'skokhozyaystvennykh nauk.

Meadow mushrooms (*Psalliota campestris*) are destroyers of buildings.
Priroda 43 no.2:119 P '54. (MLRA 7:3)

1. Leningradskiy sel'skokhozyaystvennyy institut. (Mushrooms)

ILLEGIBLE

Card 1/1 Pub. 86 - 31/36

Authors : Maleney, M. E., Cand. of Agric. Sc.

Title : Meadow mushrooms destroyers of constructions

Periodical : Priroda 2, page 119, Feb 1954

Abstract : The destructive effect of meadow mushrooms (*Psalliota campestris*) on various wood, cement and masonry structures is discussed.

Institution : The Agricultural Institute, Leningrad

Submitted :

MALENCZYK, J.

Shoemaking machinery. Pt.5. (To be contd.) p.130
(PRZEGLAD SKORZANY, Vol. 12, No. 5, May 1957, Lodz, Poland)

SO: Monthly List of East European Accessions (FEAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

MALENCZYK, J.

Shoemaking machinery. Pt. 3. (To be contd.) p. 26.
(Przegląd Skorzany, Vol. 12, No. 1, Jan. 1957, Krakow, Poland)

SO: Monthly List of East European Accessions (FEAL) LC. Vol. 6, No. 8, Aug 1957. Uncl.

MALENCZAK, J.

Shoe machinery; insole tacking machine.

P. (231) (Przegląd Skórzany. Vol. 11, no. 9, Sept. 1956, Lodz, Poland)

Monthly Index of East European Accession (EEAI) LC. Vol. 7, no. 2,
February 1958 .

MALENCZAK, J.

A machine for clasping flexible parts.

p. 202 (Przegląd Skorum. Vol. 11, no. 8, Aug. 1956, Lodz, Poland)

Monthly Index of East European Accessions (FEAI) LC. Vol. 7, no. 2,
February 1958

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700007-6

MALENCIK, Ervin, inz.

Compacting the earthwork by firing. Zel dop tech 12 no.12:
316-317 '64.

MALENCIK, Ervin, inz.

Excessive rail abrasion and its reduction. Zelez dop tech
11 no.1:5-6 '63.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700007-6

MALENCHENKO, A.F.

Functional state of kidneys in sugar diabetes mellitus. *Trudy
AN BSSR. Ser. biol. nat. no. 4:130-132 1964.*

(MBA 12/11)

MALENOHENKO, A.F.

Morphological changes in the renal glomeruli in alloxanic
diabetes. Dokl. AN BSSR 8 no.12:824-826 D '64. (MIRA 18:4)

1. Sektor gerontologii AN BSSR.

MALENBERG, N.Ye.; YUKINA, A.I.; YERMILOVA, M.M.

Catalytic dehydration in the presence of zirconium phosphate.
Vest.Mosk.un.Ser.2:Khim. 20 no.3:31-35 My-Je '65.

(MIRA 13:3)

1. Kafedra organicheskogo kataliza Moskovskogo universiteta.

L 5063-66

ACCESSION NR: AP5025508

FeP04 was shown to be active and specific in the liquid-phase alkylation of benzene and its homologs. The amounts of monoalkylated products obtained, ranging from 38 to 73%, are comparable to the yields obtained in the presence of such widely employed catalysts as AlCl_3 and FeCl_3 . In contrast to the latter, the formation of dialkyl derivatives and of considerable amounts of tars is not observed in the presence of FeP0_4 . However, reactions of acylation and of alkylation of benzene and its homologs by haloalkyls of normal structure were not detected. "The authors take this opportunity to thank Ye. N. Rossolovskiy and L. D. Ashkinadze for his comments and assistance." Orig. art. has: 2 tables. ^{44,55} _{44,55}

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University) ^{44,55}

SUBMITTED: 16Dec63

ENCL: 00

SUB CODE:

NO REF SOV: 018

OTHER: 006

Card 2/2 ^{ind}

L 5063-66 EWT(m)/EPF(c)/EWF(j) RM
 ACCESSION NR: AP5025508

UR/0062/65/000/009/1565/1570
 541.128

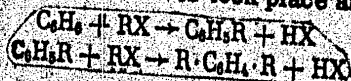
AUTHOR: Malenberg, N. Ye.; Balandin, A. A.; Kukina, A. I.

TITLE: Catalytic properties of iron orthophosphate. Report No. 2. Alkylation of benzene and its homologs and derivatives

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 9, 1965, 1565-1570

TOPIC TAGS: iron compound, alkylation, alkyl benzene

ABSTRACT: The catalytic properties of iron orthophosphate FePO_4 were studied in the alkylation of benzene and its homologs with haloalkyls of various structures. Benzene, toluene, ethylbenzene, cumene, chlorobenzene, and phenol were alkylated with sec-propyl chloride and bromide, and with tert-butyl chloride. The condensation of benzene and its derivatives with aliphatic monohalo derivatives took place as follows:



Card 1/2

09010209

BALANDIN, A.A., akademik; KUKINA, A.I., MALENBERG, N.Ye.; YERMILOVA,
M.M.

Catalytic properties of zirconium phosphata. Dokl. AN SSSR 181
no.4:851-852 Ap '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

BALANDIN, A.A.; KUKINA, A.I.; MALENBERG, N.Ye.

Catalytic properties of iron phosphate. Report No.1: Dehydration
of alcohols. Izv.AN SSSR Otd.khim.nauk no.4:574-581 Ap '62.
(MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Alcohols) (Dehydration (Chemistry)) (Iron phosphate)

BOLDYREV, V.G.; KOPROVA, L.I.; MALEKVICH, M.S.

Allowing for variations in vertical temperature and humidity profiles in determining the earth's surface temperature from the leaving radiation. Izv. AN SSSR. Fiz. atm. i okean. 1 no.7:703-714 J1 '65. (MIRA 18:8)

1. Institut fiziki atmosfery AN SSSR i Mirovoy meteorologicheskoy tsentr.

KHAR'KOV, Vladimir Afanas'yevich; KURASHEV, Leonid Andreyevich; MALEKSENKO,
Petr Andreyevich; KOLESNIKOV, F.M., redaktor; PIMCHENKO, S.I.,
tekhnicheskij redaktor

[General overhauling of oil and gas wells in the Grozny Oil
Administration fields] Opyt kapital'nogo remonta nef'tian'nykh i
gazovykh skvazhin na promyslakh ob'edineniya "Grozneft'." Grozny,
Groznefskoe kn-vo, 1955. 53 p. [Microfilm] (MLRA 10:4)
(Oil wells) (Gas, Natural)

MALEKHONOV, D. P.

Intershop specialization and labor productivity. Sots. trud 4 no.4:
105-107 Ap '59. (MIRA 12:6)

1. Starshiy inzhener po organizatsii truda tkatskogo proizvodstva
Moninskogo kombinata.
(Monino--Textile industry)

BITUNOV, Ye.I.; KAPRALOV, M.K.; MALEKHONOV, D.P.

Specialised gaitings used in weaving. Tekst. prom. 18 no.9:
7-10 S '58. (MIRA 11:10)

1. Zaveduyushchiy tkatskim proizvodstvom Moninskogo kamvol'nogo kombinata (for Bitunov). 2. Nachal'nik tsekha avtomaticheskikh tkatskikh stankov (for Kapralov). 3. Starshiy inzhener po normirovaniyu tkatskogo proizvodstva (for Malekhonov).
(Weaving)

KOMINEK, Antoni, MALEK-STRUSINSKA, Jadwiga

Erythema infectiosum. Pediat. polska 33 no.5:571-575 May 58

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego A.M. w Warszawie
Kierownik: prof. dr med. J. Bogdanowicz i z Poradni Dzieciecej Rejonowej
Przychodni ul. Leczo 17. Kierownik: dr med. W Szotowa. Adres:
Warszawa, ul. Wolska 37, Klinika Chorob Zakazncy Wieku Dzieciecego.
(ERYTHEMA, in inf. & child.
infectiosum (Pol))

MALEK, Zdenek; MRNKA, Miroslav

Obtaining gallium from waste materials in the production of germanium. Chem prum 14 no.9/456-458 S '64.

1. Chair of Technology of Nuclear Fuels and Radiochemistry,
Higher School of Chemical Technology, Prague.

L 18511-66 EWP(t) LRP(c) JD

AC: NR: AP6G10258

SOURCE CODE: CZ/0034/65/000/003/0220/0220

AUTHOR: Malak, Z. (Graduate chemist); Mrnka, M. (Engineer)

ORC: none

TITLE: Method for recovery of gallium contained in wastes of germanium production

SOURCE: Hutnicke listy, no. 3, 1965, 220

TOPIC TAGS: gallium, germanium, metal refining

ABSTRACT: The article is an abstract of Czechoslovak Patent Application Glass 40a 41/00, PV 4668-63, dated 20 August 1963. The method is similar to the one used to obtain gallium from the anode alloy during Al refining, as described in Russian Patent 127 421. Ga is extracted from the wastes by a 0.1 - 0.5 M solution of a high-molecular weight amine, such as N-octyl-amine, or tri-N-octylamine in an inert solvents from a medium of 3-6 M HCl, and is reextracted by lye or water. [JPRS]

SUB CODE: 11 / SUBM DATE: none

Card 1/99

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700007-6

MALEK, Zdenek, CSc.; MASTNER, Jiri, CSc.

Basic properties of the Tandel. Sdel tech 12 no. 3:82-85
Mr '64.

MALEC, Zi.

Electromechanical synthetizer of periodic courses. Slaboproudy
obzor 24 no.2:114-116 F '63.

MALEC, Zd.

A device for measuring the phase angles between the time vectors of tension and current. Slaboproudy obzor 24 no.1:45-47 Ja '63.

FRAIT, Z.; KAMBERSKY, V.; ONDRIS, M.; MALEK, Z.

Effective magnetization and uniaxial anisotropy of permalloy films. Chekhosl fiz zhurnal 13 no.4:279-285 '63.

1. Fyzikalni ustav, Ceskoslovenska akademie ved, Praha.

Frequency dependence of the coercive ... S/181/63/005/003/045/046
B102/B180

1958). α is the activation field ($1.95 \cdot 10^3$ v/cm, μ the mobility
($6.0 \text{ cm}^2/\text{v} \cdot \text{sec}$). With $\alpha = 2.4 \cdot 10^3$ v/cm and $\mu = 1.64 \text{ cm}^2/\text{v} \cdot \text{sec}$, agreement
was complete. There is 1 figure.

ASSOCIATION: College of Science and College of Education University of
Baghdad, Irak (Al Ali, Salim); Fizicheskiy institut
Chekhoslovatskiy Akademii nauk, Praga (Physics Institute
of the Czechoslovakian Academy of Sciences, Prague)
(Malek, Fousek)

SUBMITTED: December 4, 1962

S/181/63/005/003/045/046
B102/B180

AUTHORS: Malek, Z., Fousek, J., Al Ali, N. S., and Salim, A. J.

TITLE: Frequency dependence of the coercive field of
triglycinesulfate crystals

PERIODICAL: Fizika tverdogo tela, v. 5, no. 3, 1963, 961-962

TEXT: In a previous paper (Proc. Phys. Soc., 80, 1199, 1962) the authors showed that triglycinesulfate (TGS) displays an anomalous increase in with repolarization at very low current values and that even at very low frequencies (ω) there is marked ω -dependence of the coercive field E_c .

But E_c depends not only on the frequency but also on the field amplitude.

Now the dependence of $1/E_c$ on the amplification rate (dE/dt from 0 to 100 v/cm.min) was measured for TGS crystal plates of thickness $d = 1$ mm, to

which silver electrodes (0.8 cm^2 area) were applied in vacuo. With linearly increasing field amplitude $1/E_c$ was found to drop linearly with

rising dE/dt , according to $E_c = \alpha / \ln(E_c^H / 2.6 \dots)$ (J. Appl. Phys. 29, 1742,

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MALEC, Zd.

Use of a transistor as temperature sensing device. Slaboproudy
obzor 23 no.7:415-417 J1 '62.

MALEC, Zd.

Some possibilities for using p-n-p-n diodes in circuits.
Slaproudy obzor 23 no.6:355-357 Je '62.

MALEC, Zd.

High frequency oscillator control by pulse counting. Slaboproudy
obzor 23 no.2:116-118 F '62.

Effects of the extraction medium... Z/009/62/000/006/001/002
E112/E153

a correlation between the dielectric constant of the solvent and the extraction coefficient was established. Solvents with high dielectric constant reduced the extraction coefficient. However, the chemical nature of the solvent proved also of decisive importance. Chloroform, for instance, produces adducts with TOA, probably by hydrogen bonding with the mobile H of CHCl_3 and extraction of uranyl sulfate is consequently far below 100%. It is suggested to employ solvents which are completely inert to amines, but have a low dielectric constant, such as benzene or carbon tetrachloride.

There are 5 figures.

ASSOCIATION: Vysoká škola chemickotechnologická, Praha, katedra technologie jaderných paliv a radiochemie
(University of Chemical Technology, Department of Nuclear Fuels and Radiochemistry, Prague)

SUBMITTED: December 29, 1961

Card 2/2

Z/009/62/000/006/001/002
E112/E153

AUTHORS: Mrnka, Miroslav, and Málek, Zdeněk
TITLE: Effects of the extraction medium on the recovery of
uranyl sulfate by means of tri-n-octylamine

PERIODICAL: Chemický průmysl, no.6, 1962, 297-300

TEXT: The following principal parameters controlling the extraction of uranyl sulfate from a sulfate medium by means of tri-n-octylamine (TOA) were determined. 1) Effect of TOA-concentration with respect to organic solvent medium on extraction performance. Solvents investigated were benzene, chloroform and carbon tetrachloride. Concentration of H_2SO_4 in aqueous phase was kept constant. Result: extraction isotherms were S-shaped. 2) Effects of initial H_2SO_4 -concentration on the extraction coefficient: coefficient increases with increased H_2SO_4 , to reach maximum at 0.05 M. Higher concentrations reduce the extraction. It is postulated that the uranyl sulfate-TOA-complex is displaced from the organic phase by increased H_2SO_4 -concentrations. 3) Effect of sulfate ions: the extraction coefficient decreases with increased sulfate ion concentration. 4) Effect of solvent: ✓
Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700007-6

JANKU, Jan, inz.; MALEC, Zdenek, inz.

Outlook for digital automation. Part 3. Automatizace 5 no.4:98-102
Ap '62.

JANKU, Jan, inz.; MALEC, Zdenek, inz.

Elements for digital automation. Automatizace 5 no.2:34-38,45 F 162.

Per Mn. Kontabliche der der (Punktsatz, 2000)
Berlin, vor 4. 11. 2000

10. Determination of Fe.⁺⁺ Content and of the Lactic Dehydrogenase-Enzyme Activity of Muscle Specimens from Tumour-bearing Mice. By H. SCHÖDER of the Institute of Magnetic Industrial Materials of the D.M.F., PG, Leipzig pp 149-152.
11. Dependence of Electric Resistance and Thermoelectric Forces on the Partial Pressure of Oxygen in Nickel-Chrome-Magnesium Ferrite, By H. SCHÖDER of the Institute of Magnetic Industrial Materials of the D.M.F., PG, Dessau p 150.
12. "Magnetic Hysteresis of Thin Layers." By K. MEHNERT and H. SCHÖDER of the Physicochemical Institute of the Germanische Acad. Soc. of Sciences, Prague and the Institute of Magnetic Industrial Materials of the D.M.F., PG, Dessau pp 143-146.
13. Significance of Capillary Analysis for Storage Research. By N. ULMAN of the Institute of Nutrition of the D.M.F., PG p 144.
14. On the Implication of α -D-Glucose Inhibitions in Electrolytization of Cobalt, by E. FENNER and J. FÄHRIGER of the Institute of Applied Radioactivity (Carlsruhe) and the Governmental Laboratory of the D.M.F., PG, Leipzig pp 145-153.
15. Spectrochemical Determination of Oxygen in Olefinic Fats. By Z. GATZKE and F. LEINOW of the Institute of Nutrition of the D.M.F., PG, Potsdam-Rehbrunn pp 154-159.
16. Contribution to the Metabolism of Galactose-Containing Oligosaccharides. By K. FÄHRIG, H. FÄHRIG and H. FÄHRIGER of the Institute of Nutrition of the D.M.F., PG, Potsdam-Rehbrunn pp 159-167.
17. Analytic Studies on Trans-Esterified Fats. By K. GUTWIL, I. GUTWIL and G. WITTE of the Institute of Nutrition of the D.M.F., PG, Potsdam-Rehbrunn and the Institute of Food Chemistry and Technology (Karlsruhe), and the Institute of Post-Cardiology of the Municipal Hospital für Lebensmittelchemie und -physik (Leipzig) pp 157-159.
18. Separation of Phases and Nuclear Formation in the Preparation of "Microkernels". By RHEINE and P. KUNZE of the Institute of Applied Microchemistry, which is attached to the Governmental Simulation School of the D.M.F., PG pp 150-159.
19. On the Separation into Components of the Thermal Extract of a Castor-Oil Fraction (Chinolin) With Special Reference to the Soluble Parts. By M. KNEPE, G. REHMEIS and E.-J. FRANKS of the Institute of Organic Chemical Process Technology of the D.M.F., PG, Leipzig pp 159-160.

MAPLE, 2,

MALEC, Zd.

Water-level surge recorder. Slaboproudy obzor 22 no.121765-768 D '61.

(Water) (Electronic measurements)

MALEC, Zd.

Mechanical resonance generators and relays. Slaboproudy
obzor 22 no.10:640-642 0 '61.

23572

Z/039/61/022/004/001/003
E024/E335

The Tunnel Diode

ASSOCIATION: Výzkumný ústav matematických strojů, Praha
(Research Institute for Computers, Prague)

SUBMITTED: December 10, 1960

Fig. 13:

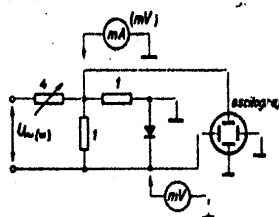
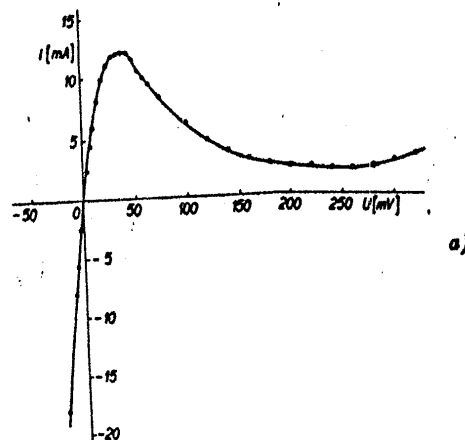


Fig. 14a:



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E024/E335

The Tunnel Diode

applied to the input. The response of the circuit to a 1 Mc/s sinusoidal input is shown in Fig. 17b. Fig. 17c shows the response to a 3 Mc/s signal. The rise time was measured as 20 m μ sec. The simple circuits, however, are somewhat unstable. The advantages of the tunnel diode are mainly its usefulness for high frequencies, its independence of temperature and radiation, low noise level, the relative ease of manufacture and the probable stability of its characteristics. The difficulties encountered are mainly due to the fact that the tunnel diode is a dipole and therefore stages within a circuit have to be isolated by non-reciprocal elements or other arrangements. There are 17 figures and 14 references: 1 Czech and 13 non-Czech. The four latest English-language references quoted are: Ref. 3 - L. Esaki, Solid State Physics, 1960, p. 514; Ref. 5 - M.E. Hines, Bell System Technical Journal, 1961, Vol. 39, No. 31 Ref. 10 - I.A. Lesk et al, Electrical Engineering, 1960, Vol. 79, No. 4; Ref. 11 - E. Goto, Trans. IRE EC-9, 1960, No. 1.

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Z/039/61/022/004/001/003
E024/E335

The Tunnel Diode

with $|R_n| > 1.8$ ohm. Fig. 14c shows the characteristic of a diode with $|R_n| < 1.8$ ohm. In this case the characteristic curve is not fully traced because of instantaneous jumps. Fig. 14d shows characteristics rendered useless by oscillations of the diode in the measuring circuit. Fig. 14e shows the characteristic of a reverse rectifier type diode. The tunnel diode can also be used in some simple circuits, such as the simple oscillator shown in Fig. 16a formed by a resistance R_1 of 40-50 ohm, a wire-wound 6 ohm resistor R_2 whose inductance is added to L_s so that the frequency given by this inductance and the junction capacity is smaller than the limiting frequency of the diode. A single battery and the tunnel diode are the further elements of the circuit. The oscillator gives a signal of about 100 mV at a frequency of 5-10 Mc/s. Similarly, a simple bistable circuit is shown in Fig. 17a. This circuit can be switched by a sinusoidal voltage

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Z/039/61/022/004/001/003
EO24/E335

The Tunnel Diode

each counting stage (Ref. 11 - E. Goto, Trans. IRE EC-9, 1960, No. 1). The most important parameters for the application of tunnel diodes are I_p , U_p , I_v , ω_m . The ratio I_p/I_v , together with the value of I_p , determine the range of negative resistance. The highest possible values of this ratio are desirable. The ratios at present achieved are between 5 and 10 for germanium diodes and between 10 and 15 for silicon diodes. In the measurement of DC characteristics, care must be taken to avoid oscillations and therefore the measuring circuit must have an output resistance smaller than $|R_n|$. The inductance of the circuit must also be strictly controlled because it is additive to L_g . Fig. 13 shows the circuit used for the oscillographic measurement of the AC characteristics and for the manual measurement of the DC characteristics. The output resistance of the circuit is 1.8 ohm. Figs. 14a and 14 b show the characteristic of a diode

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Z/039/61/022/004/001/003
E024/E335

The Tunnel Diode

frequency of the diode is given by Eq. (14) and is of the order of magnitude of Gc/sec:

$$\omega_m = \frac{1}{R_n C} \sqrt{\frac{R_n - R_s}{R_s}} \quad (14) .$$

Tunnel diodes can be used in a variety of circuits and the paper discusses their use in amplifiers and in switching circuits. Because of its basic dipole nature it is difficult to use the tunnel diode in multistage amplifiers. The problem of isolating the stages has been successfully overcome only in the microwave region (Ref. 12 - Chirilian, P.M., Proc. IRE 48, 1960, No. 6). The difficulty of the bilateral character of the tunnel diode is also encountered in its application as a switching element in counting circuits. The system can be made unilateral by the use of several diodes in

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Z/039/61/022/004/001/003

E024/E335

The Tunnel Diode

consisting of an inductance L_s , in series with the negative resistance R_n shunted by the capacitance C . Further in series is the resistance R_s . In the region of the working point U_o, I_o , the characteristic curve can be linearised so that:

$$i - I_o = - \frac{1}{R_n} (u - U_o) \quad (1)$$

where R_n is the absolute value of the negative resistance at the working point. This resistance is shunted by the junction capacitance C , which we consider constant for small signals. R_s includes the resistance of the leads and losses in the crystal. L_s is the inductance of the leads. The impedance of the diode follows from the equivalent circuit. The limiting

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Z/039/61/022/004/001/003

E024/E335

9,4330


AUTHORS: Janků, Jan, Engineer and Malec, Zdeněk, Engineer

TITLE: The Tunnel Diode

PERIODICAL: Slaboproudý obzor, 1961, Vol. 22, No. 4,
pp. 194 - 201

TEXT: The tunnel diode differs from other active semiconductor components in that the transport of carriers occurs instantaneously by tunnelling rather than within a finite time determined by the mobility of minority carriers. Therefore, the tunnel diode is capable of working in the microwave region and its characteristic curve, with its negative resistance region, is practically independent of temperature within a wide range. The action of the tunnel diode is explained by the tunnelling of carriers from the conduction band of a highly doped n-region through a thin barrier into the valence band of a highly doped p-region. The small signal electrical properties of a tunnel diode in the region of negative resistance can be expressed by an equivalent circuit

Card 1/10



JANKU, Jan, inz.; MALEC, Zdenek, inz.

Design elements for digital automation. Automatizace 4 no.11:332-336
N '61.

1. Vyzkumny ustav matematickych stroju, Praha.

(Electronic calculating machines)

23533

The Tunnel Diode

Z/037/61/000/004/001/004
E024/E435

48 (1960), 359; Hall, R.N.: Trans. IRE ED-7 (1960), 1.

ASSOCIATION: VÚMS, Praha (VÚMS, Prague)

SUBMITTED: October 10, 1960

Card 4/4

23533

Z/037/61/000/004/001/004
E024/E435

The Tunnel Diode

If the diode is used in a tuned amplifier, the above inequality must be reversed. The amplification factor of a tunnel diode can be very large but, in practice, tuned amplifiers are used to assure stability. In a switching circuit, R_0 must be smaller than $|R_N|$. The switching time is of the order of 10^{-10} sec. Various switching circuits using tunnel diodes are discussed in Ref. 4 (Lesk, I.A., Electronics 32 (1959), 60). Finally, the authors discuss very simple circuits using tunnel diodes. The simplest oscillator using such a diode consists of a 1.5 V battery in series with a resistance of 40 ohms and a tunnel diode. The diode is shunted by a wire-wound resistor of 6 ohms. This oscillator produces a peak-to-peak signal of 100 mV at 5 to 10 Mc/sec. An equally simple bi-stable circuit can be constructed. Acknowledgments are expressed to Professor M.Vul, Moscow; Engineer J.Karlovsky and Doctor H.Frank of VUST, Prague. There are 13 figures, 2 tables and 22 references: 2 Soviet-bloc and 20 non-Soviet-bloc. The references to the four most recent English language publications read as follows: Pucel, R.A.: Electrical Manufacturing 65 (1960), 72; Scarr, R.W.A.: British Communications and Electronics 7 (1960) 254; Mead C.A.. Proc. IRE Card 3/4

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Z/037/61/000/004/001/004
E024/E435

The Tunnel Diode

diode. Similarly, the inductance of the circuit must be kept as low as practicable. The voltage-current curve in the vicinity of zero voltage was found to be parabolic for some, but not for all, samples of tunnel diodes. The equivalent circuit of the tunnel diode for small signals in the region of negative resistance consists of the negative resistance R_N , shunted by the capacitance C , and the resistance R_s and inductance L_s in series with these. The limiting frequency is given by

$$f_{\max} = \frac{1}{2\pi R_N C(U)} \sqrt{\frac{R_N - R_s}{R_s}} \quad (12)$$

The diode can be used in three different types of circuit: oscillators, amplifiers and switching circuits. In amplifier and oscillator circuits, the output impedance "seen" by the diode must be larger than the absolute value of the negative resistance. In an oscillator, the output impedance R_o must fulfil the further condition

$$R_o \geq \frac{L}{C |R_N|}$$

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E024/E435

9.4330

AUTHORS: Marek, A., Malec, Z. and Janků, J.

TITLE: The Tunnel Diode

PERIODICAL: Československý časopis pro fysiku, 1961, No.4, pp.291-306

TEXT: The current-voltage characteristics of tunnel diodes are usually explained with the aid of band theory and the tunnel effect. In order to account for the so-called excess current, localized energy levels in the barrier region have to be invoked. The authors suggest a series of assumptions which might qualitatively explain the characteristic curves of tunnel-diodes, including the region of excess current, without localized levels. The suggested hypothesis has neither been worked out in detail nor has it been tested experimentally. It includes the assumption of tunnelling from the conduction band of the n-region into the conduction band of the p-region and from the valence band of the n-region into the valence band of the p-region. The authors further discuss the measurement of characteristic curves by d.c. methods. To avoid oscillations, the total resistance of the measuring circuit must be smaller than the absolute value of the negative resistance of the

Card 1/4

Distr: 4E2c

✓ The influence of the plastic deformation by cold-rolling on the coercive forces. ³⁰ ¹⁴
Malek (Czechoslov. Acad. Sci., Prague). Czechoslov. J. Phys. 9, 827-87 (1959) (in German). -- Iron, Ni, and some alloys (Fe-Mo-Ni) were studied. The coercive force is measured parallel and perpendicular to the direction of rolling. The exptl. results are discussed, with emphasis on the influence of dislocations and the uniaxial, induced anisotropy. 21 references. A. Krennholzer

4
 1- mjc (50)
 1

Distr: 4E2c

/ A study of the influence of dislocations on some of the magnetic properties of permalloy alloys. Zdeněk Málek (Czechoslov. Acad. Sci., Prague). *Czechoslov. J. Phys.* 5, 013-28 (1959) (in English).—The influence of dislocations produced during plastic pulling on some magnetic properties is studied experimentally with special attention to the coercive force of Fe-Ni alloys with a cubic face-centered lattice. Vicena's theory (*Czechoslov. J. Phys.* 5, 480 (1955)) on the influence of dislocations on the coercive force is rendered more accurate and the dependence of the coercive force on the plastic lengthening of the samples is derived for the above-mentioned alloys; the results are compared with the measured dependencies. The observed anomalies are explained. 36 references. A. Krenheller

3
1-mjc (JD)
1

L 45081-66

ACC NR: AP6027199

frequency dependence of the complex effective permittivity, dielectric nonlinearities of the tandel, and the thermoelectric force measured by a thermocouple on its surface. From the study of the frequency dependence of these parameters at various temperatures the conclusion is drawn that the probable cause of the origin of mechanical vibrations in a tandel is the piezoeffect. The authors would like to express their gratitude to Ing. J. Janta of the Institute of Radio Engineering and Electronics, Czechoslovak Academy of Sciences, to Associate Professor Dr. J. Tichy of the Technical University in Liberec and to Dr. J. Mastner of the Institute of Radio Engineering and Electronics for valuable discussions and suggestions, and to Associate Professor Dr. O. Taraba of the Czech Technical University for facilitating the ultrasonic experiments and helping to arrange them in his laboratory. The authors are also indebted to all their colleagues for their friendly help. Orig. art. has: 7 figures and 2 formulas. [Authors' abstract] [KS]

SUB CODE: 09/ SUBM DATE: 15Feb65/ ORIG REF: 009/ SOV REF: 001/
OTH REF: 009/

Card 2/2 blg

L 45081-66

ACC NR: AP6027199

SOURCE CODE: CZ/0055/66/016/005/0409/0422

AUTHOR: Malek, Z.; Strajblova, J.; Fiala, J.; Novotny, J.

ORG: Institute of Radio Engineering and Electronics, Czechosl. Acad. Sci.,
Prague

TITLE: The influence of proper mechanical vibrations on some properties of TGS
tandel (Paper read at the 2nd International Conference on Piezoelectricity in
Liberec on Sept 1, 1965)

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 16, no. 5, 1966, 409-422

TOPIC TAGS: mechanical vibration, tandel, flexural vibration, plane vibration,
piezoeffect, permittivity, dielectric nonlinearity, frequency dependence

ABSTRACT: In the present paper the existence is proven of mechanical vibrations
in TGS tandels in the frequency range from 5 kc/s to 1000 kc/s. A number of
resonances were found in the given range of frequencies. Mainly plain and flexural
vibrations occur. A study was made of their influence on the course of the

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A Technique for Direct Measurement of Magnetic Anisotropy in Thin Layers

represent measurements with and without the sample and curve 3 is the difference between curves 1 and 2. The lower part of Fig 4 represents the Fourier components of curve 3 in the upper part: one of these components (curve 4) has a period of 2π and it is due to residual eccentricity of the sample, while the second (curve 5) has a period of π and is due to uniaxial anisotropy. The uniaxial magnetic anisotropy constant deduced from curve 5 was $k^* = 960 \text{ erg/cm}^3$. There are 4 figures and 3 references, 1 of which is Soviet, 1 German and 1 English.

ASSOCIATION: Institut magnitnykh materialov Germanskoy Akademii nauk Iyena. Fizicheskiy institut Chekhoslovatskoy Akademii nauk, Praga (Institute for Magnetic Materials, East German Academy of Sciences, Jena. Physics Institute of the Czechoslovak Academy of Sciences, Prague)

SUBMITTED: September 10, 1959

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A Technique for Direct Measurement of Magnetic Anisotropy in Thin Layers

discuss, also, in detail the errors (and methods of avoiding them) due to the following causes: non-uniformity of the magnetic field between the pole pieces, asymmetry of the rotating system (eg due to ferromagnetic inclusions), skewness of the magnetic layer whose anisotropy is measured. Normally the magnetization vector of the layer is parallel to its surface but skewness of the layer as a whole, roughness or scratches on the copper base or presence of ferromagnetic materials on the lateral surfaces of this base may produce components of the magnetization vector at right-angles to the layer surface. This induces surface poles and, when the layer is rotated about the suspension axis during measurements, additional torques will be produced. All these points are discussed in detail and the paper ends with description of determination of anisotropy of a Permalloy (77% Ni) layer 1530 Å thick and 14 mm diameter, deposited in a magnetic field on a heated substrate. The upper part of Fig 4 shows the torque measured as a function of the angular position of the whole suspension with respect to the magnetic field between the pole pieces; curves 1 and 2 ✓

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A Technique for Direct Measurement of Magnetic Anisotropy in Thin Layers

magnetic field was obtained by means of a Weiss-type magnet (pole-piece diameter 10 cm, pole gap 3.7 cm). The sample was placed in the almost uniform central portion of the magnetic field in which the whole suspended system could be rotated uniformly about its axis (using a synchronous motor). The suspension consisted of the phosphor bronze wire to which a sample holder was attached. The holder was a Vinidur tube joined to a closed glass tube. The sample (a thin layer) was fixed with paraffin wax to a copper base in the glass tube at right angles to the phosphor bronze wire. By raising and clamping the "Vinidur" tube rotation of the suspension could be stopped. In order to make positioning and removal of the sample easier, the suspension when clamped was tilted. It was important to minimize or avoid all external effects which would introduce stray torques. To avoid mechanical vibrations the instrument was placed on stone foundations. To avoid the effect of air currents the apparatus was placed under a glass bell-jar. These measures avoided almost completely non-periodic torques. The authors

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24.2200
 67659
 SOV/126-8-6-6/24
 AUTHORS: Schuppel, W., Stemme, O., André, V. and Málek, Z

TITLE: A Technique for Direct Measurement of Magnetic Anisotropy in Thin Layers

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 6, pp 837-846 (USSR)

ABSTRACT: The authors describe a sensitive instrument (an anisometer) for direct measurement of magnetic anisotropy in thin layers. The anisometer (Fig 1) is similar to instruments used to measure the crystalline anisotropy constants by determination of torque. Since the uniaxial magnetic anisotropy constants are of the order of 1000 erg/cm^3 and consequently the maximum magnetic moment of a layer 1000 Å thick and 2 cm^2 in area amounts to only 0.02 dyne cm , the instrument should be sensitive enough to measure torques of 0.001 dyne cm . This sensitivity was achieved using free torsion of a thin (0.07 mm diameter, 34 mm length) phosphor bronze wire. The dimensions of the wire ensured that its torsional deformation remains below its elastic limit. A simple optical device made it possible to measure very small angles of rotation (several minutes of the arc when the torque is 0.1 dyne cm). The required saturation

Card 1/4

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

F

Abs Jour : Ref Zhur Fizika, No 8, 1959, 18029

Author : Malek, Zdenek; Kamberski, Vladimir

Inst : * Physics Institute Czechoslovak Academy of Sciences,
Prague, ** Mathematical Physics Faculty, Charles
University, Prague, Czechoslovakia

Title : Theory of the Domain Structure of Thin Films of Magneti-
cally Uniaxial on the Materials.

Orig Pub : Ceskosl. casop. fys., 1958, 8, No 4, 429-434

Abstract : The authors calculate the demagnetization energy of a
simple model of domain structure of a film of uniaxial
ferromagnetic substance, the axis of which is perpen-
dicular to the surface. The width of the domains, and
in the case of MnBi the total energy of the domain struc-
ture, is expressed in the form of a function of the film
thickness.

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MALEK, Z.

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/ Theory of the domain structure of thin films of magnetically uni-axial materials. Zdeněk Malek and Vladimír Kamberský (Czechoslov. Acad. Sci. Prague), Czechoslov. J. Phys. 8, 416-22 (1958) (in English).—The demagnetization energy is calcd. for a magnetically uni-axial thin film by assuming a simple domain structure. The axis of easy

magnetization is perpendicular to the film surface. The dependence of domain width on film thickness is considered, which leads to an improvement of Kittel's estimate (C.A. 41, 2290a). The width of the domain, and in the case of MnBi also the total energy of the domain structure, are found as functions of the thickness of the film. A. K.—

CZECHOSLOVAKIA/Magnetism - Experimental Methods of Magnetism

F-2

Abs Jour : Ref Zhur - Fizika, No 8, 1958, No 18135

of a small sphere of nickel with diameter of 0.3 mm, magnetized to saturation, with a probe distance of 2 cm from the specimen. If one places in the rotating probe a third coil, whose axis is parallel to the magnetic field, then by measuring the intensity of the magnetic field in an analogous manner, it is possible to plot a hysteresis loop by means of this probe. The advantages of the probe compared with the vibration magnetometer are noted.

Card : 2/2

20

CZECHOSLOVAKIA/Magnetism - Experimental of Magnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13147

Author : Kaczer, Jan., Malek, Zdenek
Inst : -
Title : Rotating Probe for the Measurement of Inhomogeneity of
the Magnetic Field.

Orig Pub : Ceskosl. casop. fys., 1957, 7, No 4, 385-392

Abstract : See Referat Zhur Fizika, 1958, No 8, 18135.

Card 1/1

~~MALEK, Z.~~

Effect of dislocation on the coercive force of iron.

P. 146 (Ceskoslovenska Morfologie. Vol. r, no. 4, 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EPAI) LC. Vol. 7, no. 2
February 1957

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13188

Author : Malek, Zdenek

Inst : Physics Institute, Czechoslovak Academy of Sciences,
Prague, Czechoslovakia

Title : Influence of Dislocations on the Coercive Force of Iron.

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 3, 335-338

Abstract : A comparison is made between the Vicena theory on the dependence of coercive force on the density of dislocations, with the experimental results, and good agreement was obtained between the two. See Abstract 13189.

Card 1/1

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13184

Author : Malek, Zdenek

Inst : -

Title : Concerning the Problem of the Dependence of the Coercive Force on Plastic Deformation.

Orig Pub : Chekhosl. fiz. Zh., 1957, 7, No 2, 244-245

Abstract : A study was made of the influence of the annealing temperature on the dependence of H_c on the plastic deformation. See also Abstract 13186.

Card 1/1

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13186

Author : Malek, Zdenek

Inst : Physics Institute, Czechoslovak Academy of Sciences,
Prague

Title : Dependence of the Coercive Force on Plastic Deformations.

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 2, 152-168

Abstract : A study was made of the influence of plastic deformation on H_c in iron, nickel, and iron-nickel alloys such as Mu-metal and Mo-permalloy. In all the investigated specimens there was observed an interesting anomaly in the dependence of H_c on the plastic deformation. It was indicated that H_c has a particularly smaller value for nickel than is usually cited, and grounds are given for this difference.

Card 1/1

MALEK, Z.

Instrument for the precise measurement of coercive forces within a 10^{-3} and 10^2
oersted. p. 99. (Ceskoslovensky Casopis Pro Fysiku. Vestnik. Vol. 7, no. 1, 1957.)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

MALEK, Z.

Dependence of coercive forces on plastic deformation. p. 57. (Ceskoslovensky
Casopis Pro Fysiku. Vestnik. Vol. 7, no. 1, 1957.)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

MALEK, Z.

The process of dependence of coercive force on plastic deformation.

P. 219 (Ceskoslovenska Morfologie. Vol. 5, no. 4, 1957 Praha, Czechoslovakia)

Monthly Index of East European Accessions (EFAI) LC. Vol. 7, no. 2,
February 1958

MALEK, Z.

New results of the coercive force theory. p. 572. (CELSKOSLOVENSKY CASOPIS
PRO FYSIKU, Vol. 6, No. 5, Sept 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

Malek, Zdenik

CZECHOSLOVAKIA/Magnetism - Ferromagnetism

F-4

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11984
Author : Malek Zdenik
Inst : -
Title : Modern Progress in the Theory of the Coercive Force.
Orig Pub : Ceskosl. casop. fys., 1956, 6, No 5, 572-593
Abstract : Survey. Bibliography, 75 titles.

Card 1/1

MALEK, Z.

"Method of Measuring in Bain's Diagram Completed by Lines Ma and Mf" P. 104
(CESKOSLOVENSKY CASOPIS PRO FYSIKU Vol. 4, No. 1, Feb, 1954 - Praha, Czech.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl.

LUKASH, B.; GEYZLAR, M.; LIBIKH, Ya.; GEROL'D, M.; GOFFMAN, Ya.;
MALEK, Ya.

Comparative study of the distribution of combined "antibiolympin"
(streptomycin, neomycin) preparations and tetracycline in the
bodies of experimental animals after their parenteral administration.
(MIRA 15:3)
Antibiotiki 7 no.3:75-79 Mr '62.

1. Kafedra epidemiologii Voenmogo meditsinskogo issledovatel'skogo
instituta i Instituta usovershenstvovaniya vrachey imeni I.Ye.
Purkine, Gradets Kralove i Issledovatel'skiy institut antibiotikov,
Roztoki u Pragi.
(ANTIBIOTICS) (TETRACYCLINE)

COUNTRY : Poland H-35
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 1959, No. 88870
 AUTHOR : Malek, W.
 INST. :
 TITLE : Determination of Vegetable and Synthetic
 Tanning Agents Between Operations in the
 Supervision of Leather Manufacture
 ORIG. PUB. : Przegl. skorzany, 1958, 13, No 9, 219-220

ABSTRACT : Supervision between operations requires the use of simple and rapid methods of analysis which permit ascertaining the nature of production irrespective of the degree of accuracy of absolute values secured by these methods. A procedure is described for determining the contents of vegetable and synthetic tanning agents in the course of supervision between operations: preparation of analytical solutions of tanning agents and determination of the content of tannins therein on the basis of specific gravity of the solution; of a modification of the method of shaking in determining tannins content; apparatus and procedure of determination, and corrections which must be made in the procedure when content of synthetic tanning agents is being determined.
 M. Lyuksemburg.

MALEK, Vladimir, Inz.

The use of potential analogies in designing filters with image parameters. Slaboprudy obzor 21 no.2:79-83 '60. (EEAI 9:6)

1. Vyvoj TESIA, Strasnice.
(Impedance (Electricity)) (Electric fulters)

ILLEGIBLE

BIRECKA, Ada; KARWOWSKI, Janusz; MALEK, Tadeusz

Distribution of vital capacity in both lungs determined by
comparative respiratory densitography and bronchspirometry
in 32 patients. Gruzlica 31 no.6:586-591 Je'63.

1. Sanatorium im. F.Dzierzynskiego, Otwock.

✱

MALIK, R.

"Hospodarska mapa Ceskoslovenska (Economic Map of Czechoslovakia) and its critique."

P. 181 (Ceskoslovenska Ethnografie, Vol. 63, no. 2, 1958,
Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LX, Vol. 7, no. 2,
September 1958

MALEN, R.

"Emil Hadac and others' V zemi sopek a ledovcu. (In the Country of Volcanoes and Glaciers); a book review."

p. 173 (Ceskoslovenska Ethnografie, Vol. 63, no. 2, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (MEAI) 10, Vol. 7, no. 2, September 1958

MALEK, R.

An economic map of Czechoslovakia.

p. 276 (Sbornik) Vol. 62, no. 3, 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (MEAI) LC, Vol 7, no. 1, Jan 1958

MALEX, R.

The Pescadores. p. 121. SNORNIK. Praha. (Journal issued by the Czechoslovak Geographical Society; with English and Russian summaries. Quarterly) Vol. 60, no. 2, 1955

SOURCE: East European Accessions List, (EEAL), Library of Congress
Vol. 4, no. 12, December 1955

1/2

CZECHOSLOVAKIA

Praque, Casopis Lekaru Ceskych, Vol 105, No 47, 25 Nov 66, pp
1273 - 1278 /continued/

than iodine-labelled derivatives or neohydrine (Hg^{203}). In
a test on a dog, the hot spot corresponded exactly to the ischemic
focus. 9 Figures, 2 Tables, 10 Western, 10 Czech references.

2/2

Cardiovascular Diseases

CZECHOSLOVAKIA

UDC 616.127-005.4-079.2

MALEK, P.; VAVREJN, B.; RATUSKY, J.; KOLC, J.; KROMRAD, L.;
Institute of Clinical and Experimental Surgery (Ustav Klinicke a
Experimentalni Chirurgie), Prague - Krc, Director (Reditel) Prof
Dr B. SPACEK; Research Institute for Medical Application of Radio-
isotopes (Vyzkumny Ustav pro Vyuziti Radioizotopu v Lekarstvi),
Prague, Director (Reditel) Dr B. VAVREJN; Institute of Organic
Chemistry and Biochemistry, Czechoslovak Academy of Sciences
(Ustav Organické Chemie a Biochemie CSAV), Prague, Director (Re-
ditel) Member of Academy F. SORM; Institute of Nuclear Research
(Ustav Jaderneho Vyzkumu) Rez near Prague, Director (Reditel) Dr
V. SVAB.

"Further Advances in Topical Diagnosis of Ischemic Lesions of
the Myocardium in Vivo."

Prague, Časopis Lékařů Českých, Vol 105, No 47, 25 Nov 66, pp
1273 - 1278

Abstract /Authors' English summary modified 7: For the diagnosis
of ischemic lesions mercury derivatives of the fluorescein line
(Hg 203 or Hg¹⁶⁷) are recommended. These derivatives have better
RI and RII indexes (torn to normal muscle, torn muscle to blood)

MALEK, P.; HAMMER, J.; ZASTAVA, V.; Pisa, Z.; KOLC, J.; GRAFFNETER, D.

Experimental models of myocardial infarction without opening of the thorax and tetracyclines. Cas. lek. cesk. 104 no.36: 986-990 10 S '65.

1. Ustav klinicke a experimentalni chirurgie v Praze (reditel prof. dr. B. Spacek, DrSc.) a Ustav pro vyzkum chorob obehu krevniho v Praze (reditel prof. dr. J. Brod, DrSc.). Submitted September 1964.

MALEK, P.

Transplantation of organs. Cas. lek. cesk. 104 no.32/33:889-894
6 Ag '65.

1. Ustav klinicke a experimentalni chirurgie v Praze (reditel
prof. dr. B. Spacek, DrSc.).

MALEK, P.; KOLC, J.; ZASTAVA, V.

Tetracycline antibiotics, and calciphylaxis. Ces. lex. konz.
104 no.12:333-335 26 Mr'65.

1. Ustav klinické a experimentální chirurgie, Praha-Krc, (reditel:
prof. dr. B. Spacek, DrSc.).

MALEK, P.; HAMMER, J.; ZASTAVA, V.; PISA, Z. Technical assistance: KOLC, J.
GRAFNETTER, D.

The diagnostic significance of fixation of tetracycline antibiotics in infarcted myocardium. Cor vasa 7 no.2:125-130 '65.

1. Institute for Clinical and Experimental Surgery and Institute for Cardiovascular Research, Prague, Czechoslovakia.

MALEK, P.; ZASTAVA, Vl.; KOLC, J.; ZAK, Fr.

On the possible diagnosis of malignant tumors by means of tetracycline antibiotics. Cas. lek. cesk. 102 no.1:16-20 4 Ja '63.

1. Ustav klinicke a experimentalni chirurgie v Praze, reditel prof.
dr. B. Spacek, DrSc. — II patologickoanatomicky ustav fakulty vseobecneho
lekarstvi KU v Praze, prednosta prof. dr. V. Jedlicka, DrSc.
(NEOPLASMS) (TETRACYCLINE) (DIAGNOSIS)

MALEK, P.; DEMELOVA, J.; ZASTAVA, V.; KOLC, J.

Problems of tetracycline antibiotics in the prevention and treatment of experimental gas gangrene. Rozhl. chir. 42 no.3: 196-200 Mr '63.

1. Ustav klinicke a experimentalni chirurgie v Praze, reditel prof. dr. B. Spacek, DrSc. Ustav ser a ockovacich latek v Praze, reditel dr. J. Malek.

(GAS GANGRENE) (CHLORTETRACYCLINE)
(ISCHEMIA) (MUSCLES) (WOUNDS AND INJURIES)

MALEK, P.; ROKOS, J.; KOJECKY, Z.; KOLC, J.; PROCHAZKA, P.; ZAK, F.

The special role of tetracycline antibiotics in the prevention and therapy of acute pancreatitis. Rozhl. chir. 42 no.3:174-180 Mr '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof. dr. B. Spacek DrSc. II vnitřní klinika lékařské fakulty PU v Olomouci Biologický ústav CSAV v Praze, reditel akademik I. Malek. II patologickoanatomický ústav lek. fak. KU v Praze, přednosta prof. dr. V. Jedlicka.

(PANCREATITIS) (TETRACYCLINE) (LIPASE)
(ENZYME INHIBITORS) (CHLORTETRACYCLINE)

MALEK, P.; ZASTAVA, V.; KOLC, J.; KOCANDRLE, V.; DOBRKOVSKY, M.

On the problem of the diagnostic use of tetracycline antibiotics. Rozhl. chir. 42 no.3:155-160 Mr '63.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof. dr. B. Spacek, DrSc. Oddel. popálenin kliniky plastické chirurgie lékařské fakulty hygienické KU v Praze, prednosta akademik F. Burian.

(TETRACYCLINE) (NEOPLASM DIAGNOSIS) (ISCHEMIA)
(NECROSIS) (INFLAMMATION) (BURNS)
(MYOCARDIAL INFARCTION) (FLUORESCENCE)

CZECHOSLOVAKIA

Prague, Sasepis Lekarskí Spolek, 4, 115 01, 1974, 11, 127-131.

accumulate and store corticosterone in to these tumors, more avidly than do tumors. In fatty necrosis of pancreas accumulation is very high. The tissue tropism of retroviruses in conjunction with fluorographic and scintillation radiolabeling techniques could be a useful diagnostic adjunct in differential diagnosis of pancreatic diseases, to identify areas of necrosis after tumors, in experimental pancreatic cancer, but not as a means, as both false positives and false negatives are the frequent occurrence, lack of specificity of results. (Bale, 1974; Bale and Fickel, 1974; authors' group) references.

01.0016-14751

1. SHUKH, V. L. and SH. J. KHAN and SH. A. J., Institute for All-
Experimental Surgery (Uzbekistan), Uzbekistan, Uzbekistan,
(Medical), Prof. Dr. V. L. Shukh, and Uzbekistan, Uzbekistan,
University of Medical Faculty, Uzbekistan, Uzbekistan,
Uzbekistan, Uzbekistan, Uzbekistan, Uzbekistan, Uzbekistan,
(Uzbekistan), Prof. Dr. V. L. Shukh, Uzbekistan.

Regarding the possibility of observing Alignment Lines (AL) in Tetraodon niloticus.

Frage, Inwiefern können Sie sich, Herr Dr. ...

Various English primary and high school textbooks, authors summarize their reviews (no data presented) which indicate that tetracyclines do not selectively concentrate in tumors to permit the diagnosis of gastric cancer by the fluorescence microscopy of gastric smears; tetracyclines accumulate in neoplastic tissues and in those undergoing regressive changes, primarily in histiocytes. Other causes of regression-necrosis be numerous or not. Only in marine animals cancer did authors find fluorescence of actual tumor cell. Many large studies

MALEK, P.; KOLC, J.; ZAK, F.

Distribution of tetracycline antibiotics in the body in shock states. Rozhl. chir. 42 no.3:187-191 Mr '63.

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(TETRACYCLINE)	(SHOCK, TRAUMATIC)	(MICE)
(RABBITS)	(DOGS)	(SHOCK, HEMORRHAGIC)
(CHLORTETRACYCLINE)		(OXYTETRACYCLINE)